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ABSTRACT

The manual was intended to provide instructions and technical data for using the Keystone Adaptive Behavior Profile, a measure of personal independence and social responsibility for handicapped students. Information on the selection and development of the scale is followed by detailed suggestions, in separate chapters, on administration and scoring, interpretation, and technichal data (including indices of validity and reliability). The profile, which is appended, rates behaviors in the following areas: school coping behaviors, social skills, emotional development, language skills, self care skills, applied cognitive skills, and academic development. (CL)

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Keystone
ADAPTIVE BEHAVIOR PROFILE
Manual

April, 1983

(Revised October, 1983)

Keystone
Area Education Agency 1

Division of Special Education

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This manual was prepared by a subcommittee of the Adaptive Behavior Task Force, Keystone Area Education Agency - Division of Special Education. It is written to provide instructions and technical data for using the *Keystone Adaptive Behavior Profile.* The authors recognize that this manual will need revision and additions with continued research on the *Profile.*

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CHAPTER 1

BACKGROUND

In the fall of 1981, a task force of the Keystone Area Education Agency was formed for the purpose of addressing agency concerns on adaptive behavior. The task force goals were: 1) to develop and operationalize a definition of adaptive behavior, 2) to determine when information on adaptive behavior functioning was needed, 3) to develop standard procedures for collecting adaptive behavior information, and 4) to emphasize the importance of adaptive behavior functioning in programming goals and individual educational program (IEP) development.

Goal 1: Definition

The definition of adaptive behavior adopted by the task force was the widely accepted definition by Grossman (1973) found in the AAMD interpretation:

> Adaptive behavior is the effectiveness or degree to which an individual meets the standards of personal independence and social responsibility expected of his age and cultural group.

Following a literature review and a statewide survey to determine the state of the art regarding adaptive behavior assessment, the task force decided that the diagnostic team could best assess adaptive behavior through evaluating an individual's functioning in the following domains.

1. Academic
2. Social
3. Language
4. Emotional
5. Self Care
6. Vocational

It was also determined that data could best be gathered in these domains through consideration of how the individual relates to the following points of reference:

1. School
2. Home
3. Community
4. Peers
5. Self

Goal 2: When Information Is needed

Following the study of current assessment procedures, literature, the mandates of Public Law 94-142, and the Iowa Rules of Special Education, the task force determined that best professional practices included the gathering of adaptive behavior information for all comprehensive educational evaluations. Depending upon the restrictiveness of the child's proposed placement, documentation on adaptive behavior deficits assumes an increasingly important role with regard to both placement justification and IEP development. It was out of a recognition of these needs that the task force conducted the statewide survey to determine what procedures were currently in use.

Goal 3: Procedures

After adopting the definition of adaptive behavior, the task force randomly selected a number of special education student files to determine what information had been gathered and to see whether that information was sufficient under the newly adopted definition. The result of the file review indicated that in most instances adaptive behavior information was insufficient and minimum standards for gathering the data were lacking.

A review of currently available instruments was undertaken in hope that an existing one could be utilized as an effective, reliable, easily used screening device. Having such data at the time of referral would provide

the diagnostic team with information to make decisions regarding additional assessment. Existing instruments proved unsuitable for a variety of reasons. Some of the major difficulties encountered with the instruments included:

1. Many were normed on populations which made generalization to a Northeastern Iowa population questionable.

2. Those that generalized to Iowa populations, such as the ABIC from the SOMPA, consumed such a large portion of staff time that utilization on each and every referral for a comprehensive educational evaluation would have proved impossible.

3. Many instruments were designed to identify specific populations such as EMH, trainable and severe/profound. Their usefulness in the identification of other special education populations was questionable.

4. Those available could not be used with all ages of school children.

5. While some assessed one or two of the identified domains, none appeared to do an adequate assessment of a majority of those domains.

6. The content of the items had questionable educational relevancy. It was the desire of the task force to find instruments which would identify possible deficit areas at a screening level, but also be useful in the development of an individual educational program.

Goal 4: Use In Program Development

The data collected and reviewed by the task force supported the need for adaptive behavior information in program development. Usefulness in educational planning became a high priority in the instrument selection and development. To emphasize the importance of adaptive behavior functioning in programming and IEP development, procedures were established and incorporated in the Keystone Adaptive Behavior Procedural Guidelines.*

* Available upon request from Keystone Area Education Agency, Elkader, Iowa.

CHAPTER 2

INSTRUMENT SELECTION AND DEVELOPMENT

In the development of the instrument, the primary guidepost was derived from an understanding of the previously agreed upon definition of adaptive behavior and the operant terms contained therein. It was felt that these terms were best manifested as observed through the individual's functioning in the domains of academic, social, language, emotional, and self care. Therefore, every attempt was made to provide a high degree of relationship among the operant terms of the definition, the domains in which these behaviors could be observed, and an overall benchmark of educational relevancy. In order to address all reference points identified in Goal #1 (school, home, community, peers, self), two scales were needed.

School Scale

To assess the domains, a scale was devised which would be appropriate for general teacher use but would not be overwhelming in terminology and time consumption. This was viewed as particularly important since it would be utilized for gathering data on all comprehensive educational evaluations. Utilizing these guideposts, the following subtests were decided upon:

1. School Coping Behaviors
2. Social Skills
3. Emotional Development
4. Language Skills
5. Self Care Skills
6. Applied Cognitive Skills
7. Academic Development

Subtest Definition

School Coping Behaviors: This subtest is designed to measure the student's organizational abilities, the student's distractibility, and the student's ability to accept information from the environment and respond to that environment.

Social Skills: This subtest was designed to give a measurement of the student's success in interacting with the various components of school social life. The subtest measures ability to read social inferences, respond to social peer group, and interact with teachers and authorities in the school setting.

Emotional Development: This subtest was designed to determine the frequency of characteristics indicative of emotional difficulties such as the student's assertiveness, communication skills with regard to the expression of feelings, and a measurement of overall emotional status.

Language Skills: This subtest was constructed to provide a measurement of receptive and expressive language functioning.

Self Care Skills: This subtest was designed to give a measurement of the degree to which the student expresses independence through responsible dress, personal hygiene, care for personal belongings, and ability to locomote in the school environment.

Applied Cognitive Skills: This subtest was designed to measure those deficit areas brought about through a student's inability to process information at a level commensurate with his peers.

Academic Development: This subtest was designed to give a basic measurement of the more important academic skills.

Item Development

The development of specific items within each subtest was achieved through a process of analyzing the construct and expressing the elements in behavioral terms. Additionally, two major considerations in the development of the items were its applicability for the general school-aged population and relevancy in educational planning. For example, the subtest of School Coping Behaviors addressed student behaviors needed for successful

performance in the classroom setting. To operationalize the student's organizational abilities, questions relating to the student's use of time, availability of school supplies and general organization skills were composed. The student's ability to accept information from the environment was addressed through questions relating to attention to learning tasks and ability to follow directions. The student's ability to respond to that environment was addressed through determining the types of questions asked by the student.

A 4-point scale was decided upon to provide a certain quantity and also a certain quality of information. The four response options were developed to correlate with the following guide:

#1 - Was indicative of a highly adaptive response which would be seen in a relatively small portion of the regular school population.

#2 - Indicated an adaptive response which could be seen in the vast majority of the school population.

#3 - Was indicative of a less adaptive response as compared with the school population.

#4 - Was indicative of a severe behavioral deficit as compared with the school population.

The *School Scale* was designed for rapid scoring and profiling so that a visual, quantitative picture of the student's adaptive skills is readily available to the professional.

Revisions and Pilot Testing

The *School Scale* underwent six separate revisions through the course of its development. Five of these revisions occurred in response to a subcommittee's input. This input resulted in a reduction of the total items, a reorganization of the items within categories, and a revision of

the wording. A pilot testing was then conducted to determine the usability of the *School Scale*. The *Scale* was completed by 200 teachers in grades K-12 across northeast Iowa. Upon completion, the teachers responded to a five question survey. A summary of the results follows:

- The average length of time needed to complete the *School Scale* was approximately 10 minutes.
- In general, the terminology was understandable and appropriate.
- Specific recommendations for revision were suggested on approximately three questions and resulted in a revision.
- No additional items were identified.
- The consensus of opinion was that the *School Scale* gave an accurate overall picture of the student being rated.

In addition, teacher comments indicated the subtest of Academic Development had some limitations for use with kindergarten children.

Uses

There are a number of possible uses for the *School Scale*. The most obvious and appropriate use is that for which it was designed - screening to assist the diagnostic team in determining what additional assessment is appropriate. Additionally, the *Scale* is designed to be useful in IEP development and in the measurement of progress toward IEP objectives. Given the device's criterion based nature and the establishment of specific norms, its use as a research instrument takes on interesting characteristics.

It was the intent of the task force to develop one screening instrument appropriate for the regular school population K-12. This precludes sub-populations with such severe disabilities that they would seldom be in a regular classroom (e.g., severely and profoundly retarded). It was not intended that the instrument be used with preschool children. Pilot and field testing established that it may also have limitations for use with kindergarten children.

Home Scale

The *Home Scale* was devised to tap the domains of social, emotional, and self care from the reference points of home and community. Examination of this scale (See Appendix A.) reveals that the first seven subtests assess the same domains found on the *School Scale*. This readily allows a comparison of the profiles and the perceptions of those who deal with the child on a day-to day basis in the settings of home and school.

The *Home Scale* begins with a section on biographical information, family structure, and educational history. This section is designed for information only and is not scored or profiled. The *Home Scale* also includes two additional subtests not found on the *School Scale* which address community and family relations. The Community Subtest is designed to measure the child's involvement in the neighborhood and community by looking at participation in community organizations, relations with community people, and the ability to locomote in the community. The Family Subtest is designed to measure the child's involvement in the family by assessing family relationships, participation, responsibility, and self-concept within that system.

It is important to remember that while there is a strong correlation between the items on this scale and the *School Scale*, the *Home Scale* has not been normed.

CHAPTER 3

ADMINISTRATION

Purpose

In the previous chapters it is explained that the *Keystone Adaptive Behavior Profile* is designed to provide educators with a systematic procedure for gathering, analyzing and reporting possible adaptive behavior deficits in school-aged children. Used at the screening level, the *Profile* provides preliminary data to help focus and guide the subsequent child evaluation.

The Keystone Adaptive Behavior Profile

The *Adaptive Behavior Profile (ABP)* includes the following components:

1. *School Scale*
2. *Home Scale*
3. *Adaptive Behavior Profile Sheet*

A copy of each of the scales and the *Profile Sheet* may be found in Appendix A.

The two scales of the *ABP - School Scale* and *Home Scale* - screen adaptive behavior with respect to the reference points of school, home, community, peers and self. The results indicate whether the student is highly adaptive, adaptive, or less adaptive in various domains as perceived by the raters. The *School Scale*, completed by teachers and school personnel who have close contact with the student, surveys behavior from the reference points of school, peers and self. The student's parents or other primary caretakers complete the *Home Scale* to survey the reference points of home and community. The *Adaptive Behavior Profile Sheet* is a summary of the scores which facilitates quantitative and visual interpretation.

Administration

The *Keystone Adaptive Behavior Profile* is devised to obtain teacher and parent perceptions of student adaptive behavior functioning. It may be

administered by school social workers, psychologists, counselors, educational diagnosticians, or by any other professionals who read and follow the instructions in this manual. As a screening level instrument, it is specifically designed for quick response and ease of scoring.

The *ABP* is not difficult to administer. It is imperative, however, that the respondents - parents and educators - understand the purpose of the screening and consent to participate.

Each of the scales which comprise the *Profile* is an independent measure. Each may be used by itself. However, it is recommended that the whole profile be administered when an overall picture of the child is desired.

It is important that the raters be familiar with the child. Information from the *School Scale* completed when the student has been in that class for less than four weeks should be viewed as tentative. Similarly, if an institution or foster placement is the home setting, an adjustment period is recommended prior to administering the *Home Scale*.

Specific directions for administering each of the scales of the *Keystone Adaptive Behavior Profile* are given below.

School Scale

The *School Scale* is completed by teachers of the classes which the student attends. At the elementary level, only one rater is common. This will generally be the teacher to whom the student is assigned. At the secondary level (and occasionally at the elementary level with departmentalization), multiple teachers provide data collection options. The teacher initiating a referral may become the rater. School guidance personnel closely involved with the student may also complete the *Scale*. Completion of the *Scale* by several or all teachers working with the student should be considered. Similarities or differences found in various classes or settings may provide valuable information.

The *School Scale* is to be administered individually. When several teachers are asked to respond, they should complete the *Scale* without consulting each other.

Each teacher completing the *School Scale* will need a copy of the *Scale* and a pen or pencil. These directions can be found at the top of the scale:

> This student is being referred to the diagnostic team for a complete evaluation. Your knowledge of the student is invaluable and will assist the team in screening areas which may need further assessment. Please complete this scale comparing the student to others in the regular classroom. Circle the one most accurate description for each question.

Those completing the *Scale* are to select and circle one, most appropriate response. Teachers should be encouraged to respond to every item. Any uncertainty in scoring should be resolved by responding in the direction of overidentification. It is also important that teachers utilize the reference group intended, that of the same age/grade peers in the regular classroom setting. The 38 items of the *School Scale* are sentence stems for which the teacher selects an appropriate description of the child. These 38 items are divided into seven subtests. Completion of the *Scale* takes approximately 10 minutes.

Home Scale

The *Home Scale* can be completed by either the mother or the father of the student or by both parents. If both parents are to rate the child, they should be asked to complete the screening without consulting each other. Other parent figures, close relatives, foster parents, etc. may be considered appropriate respondents.

Procedures for securing this scale must be determined on an individual case basis and may include: 1) forwarding to the parents for independent

completion, 2) assistance in completing at a parent conference, 3) completion in conjunction with a home visit, or 4) other methods as determined necessary or appropriate. Regardless of the method utilized, a thorough understanding of the purpose and an agreement to participate in the evaluation process should be secured prior to their receiving the instrument.

Each parent responding will need a copy of the *Home Scale* and a pen or pencil. They are asked to select the most appropriate descriptive response to 48 questions divided into nine domains or subtests. The first section of the *Scale* requests biographical, family, and educational history information. Here, the parent is to supply background data by choosing the correct response or providing brief information. The directions for the remainder of the *Scale* are printed on the form. If the examiner suspects that the parent may have difficulty reading and responding to the items, it may be necessary to be present during the administration or to utilize an interview format.

> Directions: Based on your experience with your child at home during the last 3 or 4 months and comparing your child to others his age, please circle the most appropriate description.

Parents completing the *Scale* are to select <u>one</u>, most appropriate response for each item. They are to consider behaviors present in the home setting only, within the previous 3-4 months. Completion of this scale takes approximately 20 minutes.

Scoring

Directions for scoring each scale of the *Keystone Adaptive Behavior Profile* and for using the *Profile Sheet* are given in this section.

School Scale

To score the *School Scale*, the response numbers are totaled for each subtest and the sums entered in the appropriate blanks. The sum of all subtests are then totaled to obtain the total raw score. These values are then transfered to the designated spaces on the *Adaptive Behavior Profile Sheet*. Spaces are provided to record up to five teacher ratings.

Occasionally, a teacher-rater does not respond to all items within any given subtest. Prorating is recommended for use when one item in a subtest has been left unanswered. This procedure involves averaging of the remaining items in that subtest to obtain a mean score. The mean score is then inserted for the unanswered item to obtain a more accurate subtest score. If more than one item is left unanswered, the subtest should not be scored for that rater.

When there is departmentalization and teachers do not have a comprehensive knowledge of a student, several unanswered items may occur (e.g. the secondary math teacher who is unfamiliar with a student's reading and spelling skills). If multiple respondents are available, the subtest scores may be derived through incorporating item responses from another rater to obtain that subtest score. For example, item responses from the language arts teacher may be used as the responses for the language arts items omitted by the math teacher.

Teacher uncertainty may also result in more than one response to an item. When more than one response has been marked, select the less adaptive response. For example, if both 3 and 4 are marked, the response of 4 should be used.

The above procedures require professional judgment and should be utilized with reference to the following guidelines: 1) Since this is a screening instrument, any ambiguity should be resolved on the side of overidentification, and 2) Make every attempt to arrive at the most accurate score.

Once the raw scores are computed, they are then converted into stanines using the table on the *Profile Sheet*. This plotting of stanines may take several forms - a single rater profile, two rater profile, or the average of multiple raters when there are more than two raters.

If the scores of a single rater are being profiled, the raw scores for each subtest and the total test raw score are located and circled. Connecting the circles completes the profile. See Figure I.

FIGURE I

Single Rater Profile

SUBTEST		Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Total	Average
School Coping Behaviors	12							
Social Skills	15							
Emotional Development	17							
Language Skills	9							
Self Care Skills	8							
Applied Cognitive Skills	15							
Academic Development	16							
TOTAL	92							

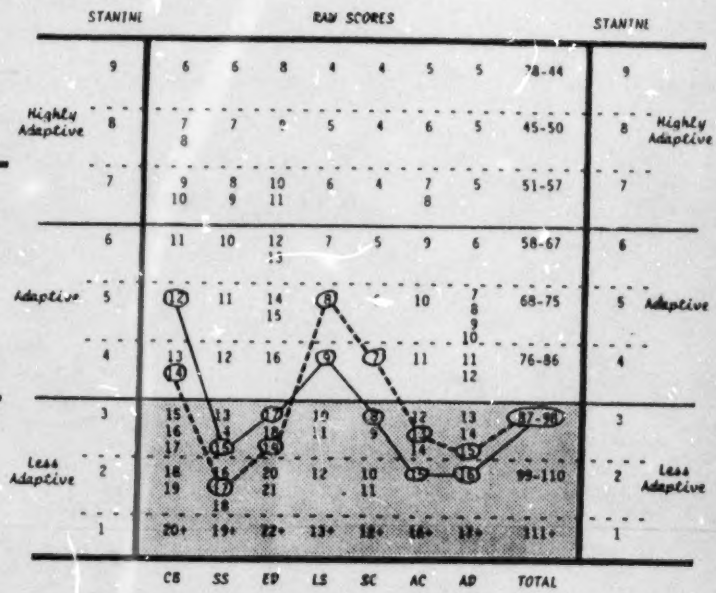
STANINE		RAW SCORES								STANINE	
	9	6	6	8	4	4	5	5	38-44	9	
Highly Adaptive	8	7 8	7	9	5	4	6	5	45-50	8	Highly Adaptive
	7	9 10	8 9	10 11	6	4	7 8	5	51-57	7	
	6	11	10	12 13	7	5	9	6	58-67	6	
Adaptive	5	12	11	14 15	8	6	10	7 8 9 10	68-75	5	Adaptive
	4	13 14	12	16	9	7	11	11 12	76-86	4	
	3	15 16 17	13 14 15	17 18 19	10 11	8 9	12 13 14	13 14 15	87-98	3	
Less Adaptive	2	18 19	16 17 18	20 21	12	10 11	15	16	99-110	2	Less Adaptive
	1	20+	19+	22+	13+	12+	16+	17+	111+	1	
		CB	SS	ED	LS	SC	AC	AD	TOTAL		

When there are two respondents, plot the scores as previously described. The examiner follows the plotting procedures for a single rater's scores, using a different color or line for each teacher who rated the student. See Figure II.

FIGURE II

Two Rater Profile

SUBTEST	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Total	Average
School Coping Behaviors	12	14					
Social Skills	15	17					
Emotional Development	17	19					
Language Skills	8	9					
Self Care Skills	7	8					
Applied Cognitive Skills	13	15					
Academic Development	15	16					
TOTAL	93	92					

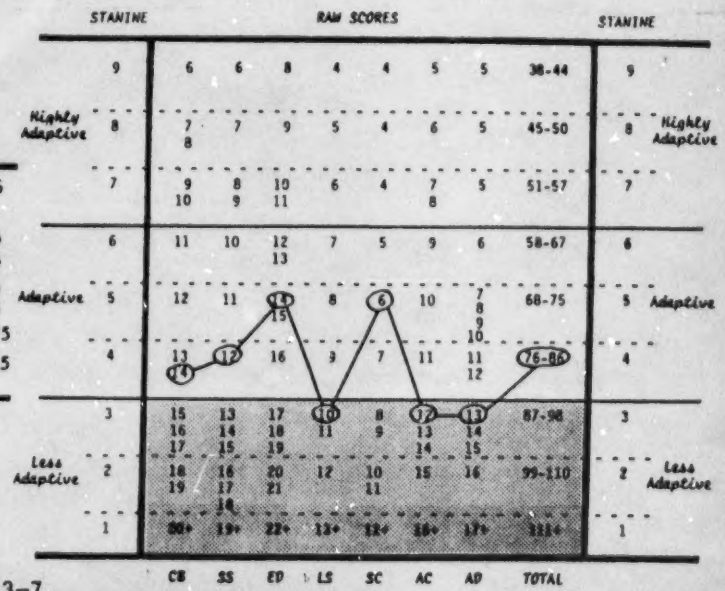


When more than two respondents are utilized and when rater scores are similar, an average of all scores for each of the subtests and for the total score is used. For example, all teachers' scores for the School Coping Behaviors Subtest are summed and then divided by the number of teacher-raters to derive a mean or average score. This score is then entered in the designated space and plotted as previously described. This averaging is continued for each subtest and the total score. See Figure III.

FIGURE III

Multiple Rater Profile

SUBTEST	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Total	Average
School Coping Behaviors	14	14	8	14	18	68	13.6
Social Skills	13	13	8	12	14	60	12
Emotional Development	15	13	10	14	20	72	14.4
Language Skills	8	12	10	10	12	52	10.4
Self Care Skills	8	-	4	4	6	22	5.5
Applied Cognitive Skills	10	-	10	10	16	46	11.5
Academic Development	9	-	15	10	17	51	12.75
TOTAL	77	-	65	76	103		80.15



There may be times when the averaging procedure explained here does not accurately reflect the range of scores present among raters. When this occurs every effort should be made to ascertain the possible cause for the differing scores (e.g., setting variables, personality conflicts, etc.) and plotting options should be considered. Again, every effort should be made to achieve the most representative profile of the referred child.

Home Scale

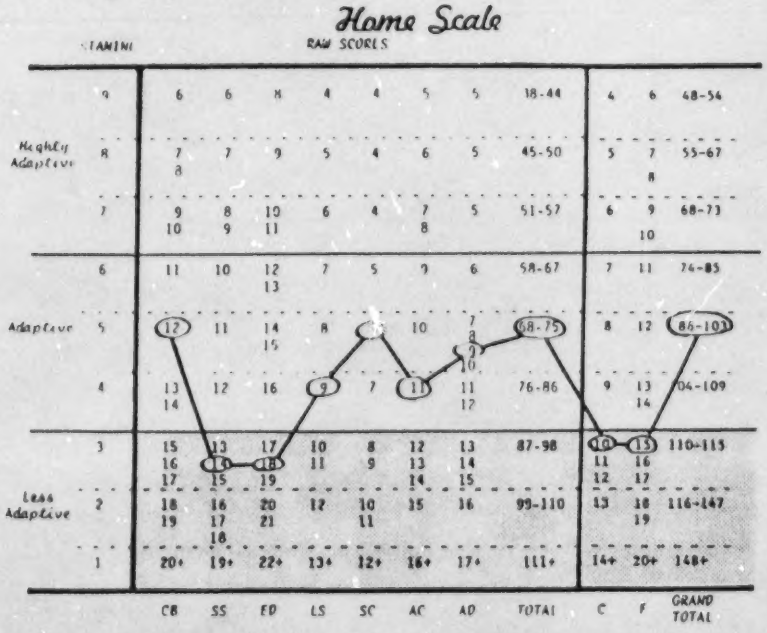
Scoring procedures for the *Home Scale* are similar to those for the *School Scale*. One first sums the response numbers for each subtest, entering the totals in the appropriate blanks both on the *Scale* itself and on the *Profile Sheet*. The scores of all the subtests are then totaled and the total raw score is entered on the *Profile Sheet*. If more than one parent or parent figure responds, the procedure is repeated. If unanswered items or double markings appear, the prorating and encorporating procedures should be used.

To profile the scores of a single responder, the raw scores for each subtest and the total test are located and circled. Connecting the circles completes the profile. See Figure IV.

FIGURE IV

Single Rater Profile

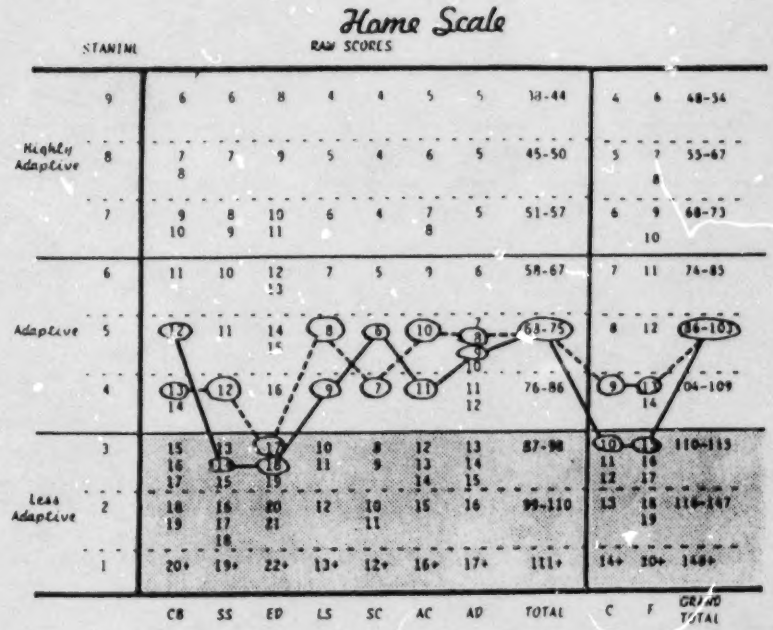
SUBTEST	Mother	Father
Coping Behaviors	12	___
Social Skills	14	___
Emotional Development	18	___
Language Skills	9	___
Self Care Skills	6	
Applied Thinking Skills	11	
Academic Development	9	
TOTAL	79	
Community	10	___
Family	15	___
GRAND TOTAL	103	___



When there are two respondents, plotting each individual's scores as for a single rater using color or line differentiation is again recommended. See Figure V.

FIGURE V

SUBTEST	Mother	Father
Coping Behaviors	12	11
Social Skills	14	12
Emotional Development	18	17
Language Skills	9	8
Self Care Skills	6	7
Applied Thinking Skills	11	10
Academic Development	9	8
TOTAL	79	75
Community	10	9
Family	15	13
GRAND TOTAL	103	92



When both scales have been scored, the appropriate raw and stanine scores entered and the results plotted, your *Profile Sheet* will look something like the example in Figure VI.

When the profiling is completed, all forms which were administered should be stapled to the *Profile Sheet* so that primary data are available as needed.

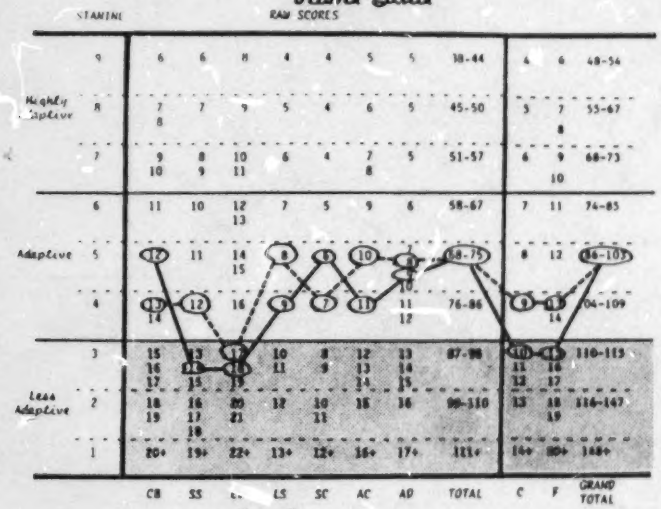
FIGURE VI

NAME _____
BIRTHDATE _____ GRADE ____

Keystone
ADAPTIVE BEHAVIOR PROFILE

EXAMINER _____
DATE _____

Home Scale



SUBTEST	Mother	Father
Coping Behaviors	12	11
Social Skills	14	12
Emotional Development	18	17
Language Skills	9	8
Self Care Skills	6	7
Applied Thinking Skills	11	10
Academic Development	9	8
TOTAL	79	75
Community	10	9
Family	15	13
GRAND TOTAL	103	97

CRITERIA

Additional assessment should be considered when scores meet any of the following criteria:

1. Any ITEM marked 4.
2. Any SUBTEST SCORE at or below the third stanine.
3. A TOTAL SCORE at or below the third stanine.

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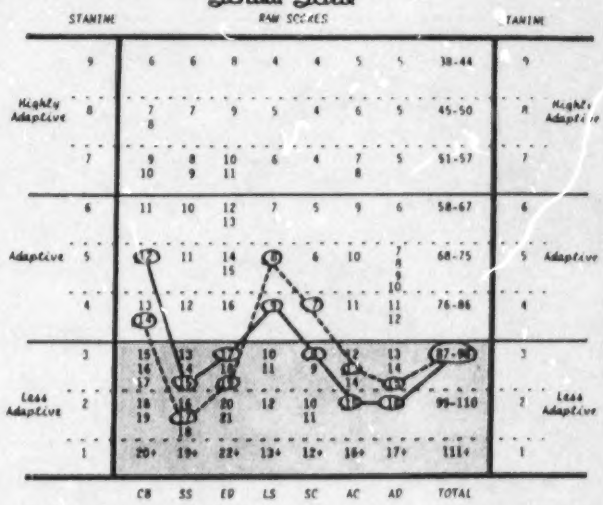
School Scale



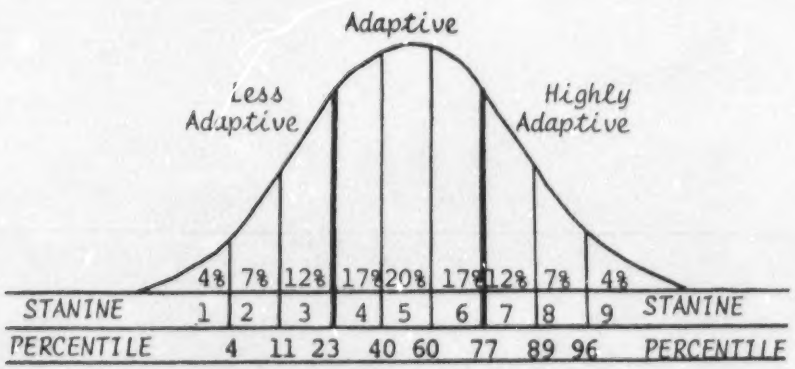
SUBTEST	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Total	Average
School Coping Behaviors	12	14					
Social Skills	15	17					
Emotional Development	17	19					
Language Skills	8	9					
Self Care Skills	7	8					
Applied Cognitive Skills	13	15					
Academic Development	15	16					
TOTAL	91	92					

CHAPTER 4

INTERPRETATION

The interpretation of the *Adaptive Behavior Profile* centers around the obtained stanine scores graphically represented on the *Profile Sheet*. Stanines, which are standard scores on a nine point scale, are especially useful with a concept such as adaptive behavior which should be thought of as falling into broad categories rather than being absolute. See Figure I. On the *ABP* stanines are available for each subtest as well as for the total of each scale. Utilizing these stanines, the profile visually indicates if the student's behavior is highly adaptive, adaptive, or less adaptive in various domains and different settings. The third stanine is the cutoff for determining less adaptive behavior, and would identify roughly twenty-three percent of regular classroom students as less adaptive.

FIGURE I


Adaptive
Less Adaptive
Highly Adaptive
4% 7% 12% 17% 20% 17% 12% 7% 4%
STANINE 1 2 3 4 5 6 7 8 9 STANINE
PERCENTILE 4 11 23 40 60 77 89 96 PERCENTILE

As a screening level instrument, scores falling within the less adaptive range indicate a possible deficiency and a more comprehensive evaluation of the deficits should be considered. The directions on the *Profile Sheet* indicate that additional adaptive assessment should be

considered when scores meet any one of the following criteria: 1) any ITEM marked 4, 2) any SUBTEST SCORE at or below the third stanine, or 3) a TOTAL SCORE at or below the third stanine. However, professional judgment and item analysis may, at times, preclude additional assessment.

Further assessment might include any of the following methods of data collection:

Student Products
Annecdotal Records
Behavioral Observation
Teacher Interview
Parent Interview
Pupil Interview
Special Purpose Instruments
Other

As indicated by this list, further adaptive behavior assessment does not always need to be drawn from standardized or normed instruments. However, as a general rule, accountability for restrictive special education placements should be supported by adaptive behavior data from formal instruments.

As the directions indicate, reviewing the *Scales* for items marked four is essential to full interpretation. The *Scales* are designed such that items marked four are significant even if the subtest score does not fall below the third stanine. Consideration of those items may uncover an obvious explanation for the score or may lead to an isolated specific deficit which warrants further investigation.

In addition to item and stanine analysis, the examiner should also consider the pattern of the profile. Does the student score low only on the scale related to school? . . . or home? Are there areas within each scale indicating specific strengths and concerns? Is there a discrepancy among raters? If so, what are some possible explanations for such discrepancies? Follow-up assessment will vary with regard to these interpretations.

Further analysis of profiles may indicate patterns that are consistent with various disability groups, thus providing specific direction to the ensuing evaluation.

The examiner is cautioned that no child should ever be diagnosed on the basis of these results alone. As a screening level instrument, the *ABP* is not capable of identifying specific disabilities. However, pattern analysis based upon commonly accepted characteristics should prove helpful in focusing the subsequent diagnostic evaluation.

Data collected on a student's adaptive behavior is a vital piece of the total information needed to make diagnostic, placement and programming decisions. No special education placement should be made without considering the student's adaptive behavior data and a full continuum of service options. Placement decisions must, of course, be based upon the composite of all evaluation information. However, adaptive behavior data can facilitate appropriate decisions.

CHAPTER 5
TECHNICAL DATA
FOR
THE *SCHOOL SCALE* OF THE *KEYSTONE ADAPTIVE BEHAVIOR PROFILE*

The Norming Study

In the spring of 1982, data was collected for norming the *School Scale* of the *KEYSTONE ADAPTIVE BEHAVIOR PROFILE*. Teachers at primary, intermediate, junior high and high school levels were selected randomly for participation in the study. Each teacher was asked to rate four students, two male and two female, selected randomly from the teacher's largest class. Because of the large private school population in many districts of northeast Iowa, proportional representation of private school teachers was planned.

The number of teachers to be included in the norming study was determined by estimating the number needed in order to have returns for at least two hundred forty students at each of the four levels. It was considered necessary to have a minimum of two hundred students for an adequate norming sample. The additional forty provided a margin for teachers who would agree to participate but who would not return forms. Alternate teacher names were selected randomly to replace the names of any teachers refusing to participate. The four school levels were considered of importance because appropriate scores might vary from age level to age level. Separate norms were not planned for public and private school students as it would have been difficult to obtain sufficient numbers of private school teacher participants to have an adequate sample. Instead, as previously mentioned, proportional representation was planned so that one set of norms could be used for both public and private school students.

Special education personnel were trained in the administration of the *ADAPTIVE BEHAVIOR PROFILE*. They were then asked to personally contact the teachers selected for participation in the study to norm the *School Scale*. It was felt that this personal contact would result in a higher percentage of returns than a mailed request. Table 1 shows the number of teachers asked to participate and the number and percentage of returns at each level.

TABLE 1

LEVEL	# ASKED	# RESPONDED	% RESPONDED	# STUDENTS[1]
Primary	60	53	88	207
Intermediate	60	59	98	234
Junior High	75[2]	57	--	226
High School	60	64[3]	--	255
TOTAL	255	233	91	922

[1]Usable forms.
[2]Many junior highs include grade 9. It was not possible to determine which teachers were primarily grade 9 and which were other grade levels so a larger sample was obtained for junior high.
[3]Includes some distributed as junior high and reclassified as high school as they were completed on students in grade 9.

The numbers of each sub-group of students included in the norming sample are reported in Table 2.

TABLE 2

GENDER	PRIMARY	INTERMEDIATE	JUNIOR HIGH	HIGH SCHOOL	PUBLIC	PRIVATE	SPECIAL EDUCATION	TOTAL
Male	69	80	88	108	345	48	58	451
Female	69	76	87	112	344	49	54	447
Total	150*	156	182*	224*	712*	97	113*	922*

* includes forms which had no information as to gender.

Because it was not the intent to compare public and private nor special and regular education students, information was not analyzed in that manner.

The responses were tallied for each of the seven subtests and for the total scale. Stanine cutoff points were determined. The steering committee decided to use the third stanine as the cutoff as it would provide selection of approximately 23% of all regular classroom students. It was felt selection

of this percentage of students would be appropriate for a screening instrument. Because of the extreme behavior indicated by a choice of response four on an item, the committee decided that a student receiving a four on any item would also need consideration for further diagnostic work regardless of his/her stanine placement.

Cutoffs for classifying students as less adaptive were determined for primary, intermediate, junior high and high school levels. It was found that the cutoff scores varied by no more than two points and, for most subtests, no more than one point; therefore, it was decided that only one norms table would be used and appears on Table 3. For those interested, the tables for the four levels appear in Appendix B. A graphic presentation of the similarities along those levels appears in Appendix C. One implication of the similarity of cut-off scores across levels might be that the raters are relating the *Scale* to the age group of the student (as intended) rather than against some ideal or adult standard of behavior.

TABLE 3

STANINE		COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
Highly	9	6	6	8	4	4	5	5	38	9
Adaptive	8	7	7	9	5	4	6	5	45	8
	7	9	8	10	6	4	7	5	51	7
	6	11	10	12	7	5	9	6	58	6
Adaptive	5	12	11	14	8	6	10	7	68	5
	4	13	12	16	9	7	11	11	76	4
Less	3	15	13	17	10	8	12	13	87	3
Adaptive	2	18	16	20	12	10	15	16	99	2
	1	20	19	22	13	12	16	17	111	1

5-3

For those who may wish to use the *Scale* in some other manner or who may wish to select different cutoff points, the tables for converting raw scores to percentile ranks appears in Appendix D.

The cutoff points for male and female were compared for each subtest. The variation was no more than two points for any subtest, and for five of the seven subtests varied by only one point. Again, it was decided that such slight differences did not require separate norms. A graphic presentation of the similarities appears in Appendix C.

Item Statistics

Though the *Scale* was developed as a criterion-referenced instrument with norms, an item analysis was considered desirable in order to determine whether all choices were being used for all items and whether items were discriminating. Ordinarily an item analysis would be done at the piloting stage as the usual purpose is for item revision. The committee felt that adhering to the item selection process for criterion-referenced instruments was more important than statistical evaluation of items. Therefore, it was decided that collecting the item information from the large norming sample and having the information on each of the four levels would be better than using the small pilot sample.

As will be seen from Table 4, only five items have low discrimination indices so items are not wasteful from a norm-referenced standpoint. It should be noted that two of the four items of the Self Care subtest have low discrimination indices. This subtest may not adequately differentiate between highly and less adaptive self care behavior. A poor score on this subtest - because it is so unusual - may be very important information about the student.

TABLE 4

SUBTEST	ITEM #	DISCRIMINATION INDEX
Emotional Development	1	.24
	2	.14
	8	.17
Self Care	1	.24
	2	.18

Table 5 shows the item with a response not used. It will be noted also that the only levels not using the response are the primary and junior high school levels. All responses for all items are used at the other two levels.

TABLE 5

LEVEL	SUBTEST	ITEM #	RESPONSE NOT USED
Primary	Emotional Development	8	4
Junior High	Emotional Development	8	4

NOTE: The complete tables with discrimination and response information for the four levels on every item appear in Appendix E.

Validity

Face Validity

As can be claimed for most instruments since no authors would construct instruments which seem to measure something other than what they claimed, this scale has face validity. It was constructed to measure adaptive behavior, and the item content would seem logically to measure that.

Construct Validity

The *Scale* also has construct validity. The construct "adaptive behavior" was analyzed for components which would reflect it. For the *School Scale*, the seven components selected as being primary components of the construct "adaptive behavior" were school coping behavior, social skills, emotional development, language skills, self care skills, applied cognitive functioning and academic development. Each of these components is in effect a construct, and each was analyzed for behaviors which would reflect it. The primary behaviors which could be observed by a teacher were then selected for inclusion in the instrument.

To establish more about construct validity, among other analyses, the scores of all students referred for comprehensive educational evaluations during the 1982-83 school year were collected. These scores were then analyzed for the total referral group, for those placed in special education programs, and for each of three disability groups--learning disability, mild mental disability, and behavior disorder groups.

The subtest correlations indicate that the selected components (subtests) seem to be measuring the same construct. The following table shows that all of the correlations are statistically significant for the large number in the sample. The guideline of values of .60 and above being indicative of a relationship is met by twelve of the sixteen pairs.

Table 6

Correlations Between Subtests of the *School Scale*

	CB	SS	ED	LS	SC	AC	AD	TOT.
CB	1.00	.54	.57	.62	.54	.62	.38	.81
SS		1.00	.71	.51	.60	.58	.26	.77
ED			1.00	.49	.60	.51	.19	.78
LS				1.00	.42	.63	.43	.76
SC					1.00	.42	.21	.69
AC						1.00	.49	.77
AD							1.00	.48
TOTAL								1.00

$r \geq .16$ significant at the .05 level

$r \geq .23$ significant at the .01 level

Though the subtests are related and may, therefore, be considered to measure the same construct, this does not provide evidence that they measure the construct of adaptive behavior. Specific evidence that this is the construct measured is obtained by comparing the disability groups to the norming group which was a random sample of regular classroom students. The comparison shows that the disability groups differ significantly from the norm group in their less adaptive scores on the *School Scale*.

Table 7

Median Scores for Disability and Regular Classroom Groups

	Learning Disability	Mild Mental Disability	Behavior Disordered	Regular Classroom	Established Cutoff
CB	15	16	17	12*	15
SS	12	14	16	11*	13
ED	16	17	19	15*	17
LS	10	10	10	8*	10
SC	7	8	10	6*	8
AC	12	14	14	10*	12
AD	14	15	13	10*	13
Tot.	86	94	99	72*	88

*The lower score is indicative of more adaptive behavior.

Table 8

Mean Scores for Disability and Regular Classroom Groups

	Learning Disability	Mild Mental Disability	Behavior Disordered	Regular Classroom	Established Cutoff
CB	15	16	15	14	15
SS	13	14	14	11	13
ED	16	17	19	15	17
LS	10	11	10	8	10
SC	7	8	9	7	8
AC	12	14	18	10	12
AD	14	15	13	10	13
Tot.	87	95	98	75	88

(See also the graphs for the percentile ranks for the median scores which appear in Appendix F.)

All t- tests for differences between the disability group mean and the regular classroom mean are significant at the .01 level with the exception of LD and regular classroom students on the self care subtest. See Table 9. The significant differences would occur by chance only one time in one hundred instances.

Table 9

t - tests of Difference Between Means of Disability Groups and the Field Study Regular Classroom Group

	Learning Disability		Mild Mental Disability		Behavior Disordered	
	Z*	n+n	t	df	t	df
CB	- 5.88	1853	- 6.90	1147	- 2.17	978
SS	-14.29	1841	-13.64	1147	- 8.33	978
ED	- 5.88	1852	- 7.69	1146	- 7.27	976
LS	-20.00	1836	-18.75	1131	- 3.28	962
SC	No Dif.	1832	- 5.88	1130	- 2.99	961
AC	-14.29	1803	-20.00	1124	-10.67	957
AD	-23.53	1790	-19.23	1115	- 8.99	953
TOTAL	-17.5	1758	-16.54	1104	-10.46	951

all t-tests are significant at the .01 level.

* Z scores because of large sample size for both samples

Since the disability group scores are less adaptive than those of the regular classroom students, the subtests would seem to be measuring something the groups have in common. The authors interpret that common characteristic to be adaptive behavior.

Concurrent Validity

Due to the uniqueness of this instrument, (see p. 1-3) comparable standardized measures of adaptive behavior are not available. Therefore, no attempt has been made to establish concurrent validity.

Predictive Validity

It was impossible to identify readily available data to use for comparison in establishing predictive validity. The only available data were actual and recommended placement. These data have a very limited/range and are influenced by many factors other than ideal placement.

Reliability

Internal Consistency

Split half reliability was calculated for the instrument to obtain a measure of internal consistency. The data from the norming study was used. The results of the Spearman-Brown adjustment for the reliability of the total instrument yielded a .98. This degree of reliability is high by any standards, but it is especially high for instruments using rating scales. With rating scales, reliability coefficients of well below .90 are considered acceptable. Reliability relates to the number of items--the more items, the more reliable the instrument. The *School Scale* has only 38 items so would not be considered a long instrument. With it being only 38 items and a rating scale, a reliability coefficient of .98 is exceptional.

Standard Error of Measurement

The standard error of measurement for the total score on the instrument was determined using the norming study data. A standard error of 2.69 was obtained. This indicates that the chances of an individual's true score being within 2.69 points of his/her obtained score are 2 in 3 or 67 in 100. The chances are 95 in 100 that an individual's true score is within 5.38 ($\pm$ 2.69) of his/her true score. The smaller the standard error, the better the reliability of the instrument, and a standard error of 2.69 is small for an instrument of 38 items with a score range from 38 to 152.

Inter-Rater Reliability

Another reliability concern with this type of instrument is inter-rater reliability. It is desirable to establish to what degree this exists with raters who have not been trained. Three completed instruments were available on each of 125 students. There is high inter-rater reliability as can be observed from Table 10. All coefficients of concordance are significant at the .01 level.

Table 10

Inter-rater Reliability for Subtests of the *School Scale*

CB	.67	SS	.62	ED	.65	LS	.57
SC	.69	AC	.62	AD	.60	Total	.60

SUMMARY

Students in need of special educational services do differ significantly from the norm group in their less adaptive scores on this scale. The data, therefore, supports the use of this scale as a screening instrument. While the data does not preclude using the instrument diagnostically, it does not provide extensive support to allow for classifying students as needing special education or as having a specific disability on the basis of a score from this instrument alone.

APPENDIX A

SCALES AND PROFILE SHEET

NAME _____ _____ EXAMINER _____

BIRTHDATE _____ GRADE ____ DATE _____

Keystone ADAPTIVE BEHAVIOR PROFILE

Home Scale

STANINE		CB	SS	ED	LS	SC	AT	AD	TOTAL	C	F	GRAND TOTAL
	9	6	6	8	4	4	5	5	38-44	4	6	48-54
Highly Adaptive	8	7 8	7	9	5	4	6	5	45-50	5	7 8	55-67
	7	9 10	8 9	10 11	6	4	7 8	5	51-57	6	9 10	68-73
	6	11	10	12 13	7	5	9	6	58-67	7	11	74-85
Adaptive	5	12	11	14 15	8	6	10	7 8 9 10	68-75	8	12	86-103
	4	13 14	12	16	9	7	11	11 12	76-86	9	13 14	104-109
	3	15 16 17	13 14 15	17 18 19	10 11	8 9	12 13 14	13 14 15	87-98	10 11 12	15 16 17	110-115
Less Adaptive	2	18 19	16 17 18	20 21	12	10 11	15	16	99-110	13	18 19	116-147
	1	20+	19+	22+	13+	12+	16+	17+	111+	14+	20+	148+

SUBTEST	Mother	Father
Coping Behaviors	____	____
Social Skills	____	____
Emotional Development	____	____
Language Skills	____	____
Self Care Skills	____	____
Applied Thinking Skills	____	____
Academic Development	____	____
TOTAL	____	____
Community	____	____
Family	____	____
GRAND TOTAL	____	____

CRITERIA

Additional Assessment should be considered when scores meet any of the following criteria:

1. Any ITEM marked 4.
2. Any SUBTEST SCORE at or below the third stanine.
3. A TOTAL SCORE at or below the third stanine.

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School Scale

STANINE		CB	SS	ED	LS	SC	AC	AD	TOTAL	STANINE
	9	6	6	8	4	4	5	5	38-44	9
Highly Adaptive	8	7 8	7	9	5	4	6	5	45-50	8 Highly Adaptive
	7	9 10	8 9	10 11	6	4	7 8	5	51-57	7
	6	11	10	12 13	7	5	9	6	58-67	6
Adaptive	5	12	11	14 15	8	6	10	7 8 9 10	68-75	5 Adaptive
	4	13 14	12	16	9	7	11	11 12	76-86	4
	3	15 16 17	13 14 15	17 18 19	10 11	8 9	12 13 14	13 14 15	87-98	3
Less Adaptive	2	18 19	16 17 18	20 21	12	10 11	15	16	99-110	2 Less Adaptive
	1	20+	19+	22+	13+	12+	16+	17+	111+	1

SUBTEST	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5	Total	Average
School Coping Behaviors	____	____	____	____	____	____	____
Social Skills	____	____	____	____	____	____	____
Emotional Development	____	____	____	____	____	____	____
Language Skills	____	____	____	____	____	____	____
Self Care Skills	____	____	____	____	____	____	____
Applied Cognitive Skills	____	____	____	____	____	____	____
Academic Development	____	____	____	____	____	____	____
TOTAL	____	____	____	____	____	____	____

Keystone
ADAPTIVE BEHAVIOR PROFILE
SCHOOL SCALE

DATE _____

STUDENT _____ AGE _____ DATE OF BIRTH _____

DISTRICT _____ PARENT(s) NAME _____

SCHOOL _____ GRADE _____ TEACHER _____ SUBJECT _____

DIRECTIONS: This student is being referred to the diagnostic team for a complete evaluation. Your knowledge of the student is invaluable and will assist the team in screening areas which may need further assessment. Please complete this scale comparing the student to others in the regular classroom. Circle the one most accurate description for each question.

SCHOOL COPING BEHAVIORS

1. Student attends to learning tasks:
   1) Completely
   2) Sufficiently to learn and accomplish tasks
   3) Occasionally
   4) Rarely, if ever

2. Student's organizational skills are:
   1) Excellent
   2) Comparable with peers
   3) Adequate in some areas, poor in others
   4) Generally deficient

3. Student's questions are:
   1) Concise and probing
   2) Indicative of appropriate thought processing and curiosity
   3) Repetitive or poorly thought out
   4) Inappropriate or non-existent

4. Student's ability to follow directions is:
   1) Superb
   2) Adequate
   3) Poor, but gets by
   4) Greatly impaired

5. Does the student have needed school supplies?
   1) Supplies are always available
   2) Seems to have what is needed
   3) Frequently borrows from others or does without
   4) Rarely has what is needed

6. How productive is the student's use of time?
   1) Work is always done promptly
   2) Uses time reasonably well
   3) Needs constant reminders
   4) Continually wastes time

CB _____

SOCIAL SKILLS

1. How well does this student get along with his peers?
   1) Gets along very well
   2) Gets along as well as most
   3) Marginally
   4) Poorly

2. Student's understanding of how peers and teachers feel about him is:
   1) Very accurate
   2) Fairly accurate
   3) Some misconceptions
   4) Greatly distorted

3. How appropriately does the student understand and respond to social situations?
   1) Responds quickly and appropriately
   2) Fairly accurately
   3) Frequent misinterpretations
   4) Completely misunderstands social situations

4. Student's language is best described as:
   1) Refined and polite
   2) Age appropriate
   3) Limited
   4) Replete with vulgarisms

5. Student's response to authority figures is:
   1) Always respectful
   2) Usually respectful
   3) Occasionally challenging
   4) Overtly hostile

6. Describe this student's status in your classroom:
   1) A true leader, highly respected by peers
   2) Fits in well with the majority of peers
   3) Has few friends
   4) An outcast

SS _____

EMOTIONAL DEVELOPMENT

1. How often is the student tardy or absent?
   1) Never
   2) Occasionally
   3) Frequent
   4) Chronic

2. How frequent are the student's complaints of illness?
   1) Never
   2) Occasional
   3) Frequent
   4) Chronic

3. How frequently is the student distracted?
   1) Rarely
   2) Occasionally
   3) Frequently
   4) Perpetually

4. How frequently is the student aggressive?
   1) Never
   2) Rarely
   3) Occasionally
   4) Frequently

5. How often does the student disrupt class?
   1) Never
   2) Rarely
   3) Occasionally
   4) Frequently

6. How often does this student seem to withdraw from social contact?
   1) Never
   2) Rarely
   3) Occasionally
   4) Frequently

7. Student's ability to express feelings and opinions is:
   1) Far above most peers
   2) Age appropriate
   3) Limited
   4) Severely impaired

8. Describe this student's overall emotional status:
   1) Always in good spirits
   2) Usually in good spirits
   3) Rarely in good spirits
   4) Never in good spirits

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LANGUAGE SKILLS

1. Student's understanding of directions is:
   1) Always accurate
   2) Usually accurate
   3) Occasionally accurate
   4) Never accurate

2. How well does the student communicate needs?
   1) Readily
   2) Communicates as needed
   3) Reticent to express needs
   4) Does not communicate needs

3. How well does the student express ideas?
   1) Superbly
   2) Adequately
   3) Marginally
   4) Poorly

4. How often does the student listen attentively?
   1) Always
   2) Usually
   3) Occasionally
   4) Never

LS _____

SELF CARE SKILLS

1. With regard to personal hygiene, this student is:
   1) Always neat and well groomed
   2) Usually neat and well groomed
   3) Occasionally neat and well groomed
   4) Rarely neat and well groomed

2. With regard to student's appropriateness of dress, this student is:
   1) Always appropriately dressed
   2) Usually appropriately dressed
   3) Occasionally appropriately dressed
   4) Rarely appropriately dressed

3. With regard to student's care for personal belongings, such belongings are:
   1) Always well maintained
   2) Usually well maintained
   3) Frequently disheveled and tattered
   4) Always disheveled and tattered

4. With regard to student's movement in and about school during class changes and special errands, the student is:
   1) Always reliable and trustworthy
   2) Usually reliable and trustworthy
   3) Encounters some difficulties
   4) Needs to be watched closely; cannot be trusted

SC _____

PLEASE COMMENT ON ANY CONCERNS THAT YOU HAVE ABOUT THIS STUDENT:

APPLIED COGNITIVE SKILLS

1. This student's maturity is:
   1) At a level more advanced than most peers
   2) At a level commensurate with most peers
   3) Below most peers
   4) Significantly below most peers

2. The student's skills for solving real life problems are:
   1) Superb
   2) Acceptable
   3) Poor
   4) Non-existent

3. The student's ability to draw conclusions from day-to-day experiences is:
   1) Superb
   2) Acceptable
   3) Poor
   4) Non-existent

4. The student's ability to plan activities is:
   1) Superb
   2) Adequate
   3) Poor
   4) Non-existent

5. The student's ability to logically sequence information is:
   1) Superb
   2) Adequate
   3) Poor
   4) Non-existent

AC _____

ACADEMIC DEVELOPMENT

1. The student's reading skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

2. The student's math skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

3. The student's ability to recall content from reading is:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

4. The student's ability to recall content from listening is:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

5. The student's spelling skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

AD _____

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Keystone AEA, 1983

Keystone Area Education Agency

BIOGRAPHICAL INFORMATION

STUDENT _____ AGE ___ DATE OF BIRTH _____

SCHOOL _____ Grade ____ Teacher _____

Parent(s) Name _____ Phone _____

Home Address _____

DATE _____

MEMBERS OF FAMILY

Name	Age	Relationship To Student	Education	Occupation

Give dates of family disruptions due to factors such as employment, parent's separation, divorce, or death. _____

What other agencies or professionals has your child or family worked with? _____

EDUCATIONAL HISTORY

For the following questions, circle one response.

1) Do you have concerns about your child's speech?
   yes no

2) Do you have concerns about your child's hearing?
   yes no

3) Do you have concerns about your child's vision?
   yes no

4) Do you have concerns about your child's health?
   yes no

What other schools has your child attended?

_____

_____

_____

_____

_____

If your child has ever repeated a grade, circle grade(s) repeated.

Kdg, 1, 2, 3, 4, 5, 6, 7, 8

Circle one response:

A. Your child:
   1) Was eager to start school (kdg)
   2) Had difficulty the first few days
   3) Had difficulty for a month or more
   4) Did not want to go to school

B. How has your child usually gotten along with teachers?
   1) Very well
   2) Pretty well
   3) A few problems with teachers
   4) Frequent problems with teachers

C. What grades does your child usually have on report card?
   1) Above average
   2) Average
   3) Below average
   4) Failing

D. Do you feel your child has behavior problems in school?
   1) Seldom or not at all
   2) Only this year
   3) This year and last year
   4) For the last three years

E. Do you feel your child has:
   1) Always liked school
   2) Usually liked school
   3) Seldom liked school
   4) Never really liked school

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PLEASE COMMENT ON ANY CONCERNS YOU HAVE ABOUT YOUR CHILD ON THE REVERSE SIDE OF THIS FORM

HOME SCALE

STUDENT _____ BIRTHDATE _____

PERSON COMPLETING SCALE _____ DATE _____

DIRECTIONS: Based on your experience with your child at home during the last 3 or 4 months and comparing your child to others his age, please circle the most appropriate description.

COPING BEHAVIORS (At home)

1. Your child attends to learning tasks:
   1) Completely
   2) Sufficiently to learn and accomplish tasks
   3) Occasionally
   4) Rarely, if ever

2. Your child's organizational skills are:
   1) Excellent
   2) Comparable with friends
   3) Adequate in some areas, poor in others
   4) Generally poor

3. Your child's questions are:
   1) Concise and probing
   2) Indicative of good thinking
   3) Repetitive and poorly thought out
   4) Inappropriate or non-existent

4. Your child's ability to follow directions is:
   1) Superb
   2) Adequate
   3) Poor, but he gets by
   4) Greatly limited

5. Can your child locate is personal belongings:
   1) Belongings are always available
   2) Seems to have what he needs
   3) Frequently borrows from others or does without
   4) Rarely has what he needs

6. How productive is your child's use of time?
   1) Work is always done promptly
   2) Uses time reasonably well
   3) Needs constant reminders
   4) Continually wastes time

CB_____

SOCIAL SKILLS

1. How does your child get along with friends?
   1) Gets along well
   2) Gets along as well as most
   3) Marginally
   4) Poorly

2. Your child's understanding of how friends feel about him is?
   1) Very accurate
   2) Fairly accurate
   3) Some misconceptions
   4) Greatly distorted

3. How appropriately does your child understand and respond to social situations?
   1) Responds quickly and appropriately
   2) Fairly accurately
   3) Frequent misinterpretations
   4) Completely misunderstands social situations

4. Your child's language is best described as:
   1) Refined and polite
   2) Age appropriate
   3) Limited
   4) Vulgar

5. Your child's response to authority figures is:
   1) Always respectful
   2) Usually respectful
   3) Occasionally challenging
   4) Openly hostile

6. Describe your child's status with friends:
   1) A true leader, highly respected by friends
   2) Fits in well with the majority of friends
   3) Has few friends
   4) An outcast

SS_____

EMOTIONAL DEVELOPMENT

1. How often is your child late?
   1) Never 3) Frequently
   2) Occasionally 4) Always

2. How often does your child complain of illness?
   1) Never 3) Frequently
   2) Occasionally 4) Continually

3. How frequently is your child distracted?
   1) Rarely 3) Frequently
   2) Occasionally 4) Continually

4. How frequently is your child aggressive?
   1) Never 3) Occasionally
   2) Rarely 4) Frequently

5. How often does your child disrupt the family?
   1) Never 3) Occasionally
   2) Rarely 4) Frequently

6. How often does your child seem to withdraw from social contact?
   1) Never 3) Occasionally
   2) Rarely 4) Frequently

7. Your child's ability to express feelings and opinions is:
   1) Far above most friends 3) Limited
   2) Age appropriate 4) Severely limited

8. Describe your child's overall emotional status:
   1) Always in good spirits
   2) Usually in good spirits
   3) Rarely in good spirits
   4) Never in good spirits

ED_____

LANGUAGE SKILLS

1. Your child's understanding of directions is:
   1) Always accurate 3) Occasionally accurate
   2) Usually accurate 4) Never accurate

2. How well does your child communicate needs?
   1) Readily
   2) Communicates as needed
   3) Reluctant to express needs
   4) Does not communicate needs

3. How well does your child express ideas?
   1) Superbly 3) Marginally
   2) Adequately 4) Poorly

4. How often does your child listen attentively?
   1) Always 3) Occasionally
   2) Usually 4) Never

LS_____

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SELF CARE SKILLS

1. With regard to personal hygiene, your child is:
   1) Always neat and well-groomed
   2) Usually neat and well-groomed
   3) Occasionally neat and well-groomed
   4) Rarely neat and well-groomed

2. With regard to your child's dressing habits, your child is appropriately dressed:
   1) Always
   2) Usually
   3) Occasionally
   4) Rarely

3. With regard to your child's care for personal belongings, such belongings are:
   1) Always well maintained
   2) Usually well maintained
   3) Frequently disheveled and tattered
   4) Always disheveled and tattered

4. With regard to your child's ability to do special errands, your child is:
   1) Always reliable and trustworthy
   2) Usually reliable and trustworthy
   3) Encounters some difficulties
   4) Needs to be watched closely; cannot be trusted

SC____

APPLIED THINKING SKILLS

1. Your child's maturity is:
   1) At a level more advanced than most of his friends
   2) At a level equal to most of his friends
   3) Below most of his friends
   4) Significantly below most of his friends

2. Your child's skills for solving real life problems are:
   1) Superb
   2) Acceptable
   3) Poor
   4) Non-existent

3. Your child's ability to draw conclusions from day-to-day experiences is:
   1) Superb
   2) Adequate
   3) Poor
   4) Non-existent

4. Your child's ability to plan activities is:
   1) Superb
   2) Adequate
   3) Poor
   4) Non-existent

5. Your child's ability to logically order information is:
   1) Superb
   2) Adequate
   3) Poor
   4) Non-existent

AT____

ACADEMIC DEVELOPMENT

1. Your child's reading skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

2. Your child's math skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

3. Your child's ability to remember what he reads is:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

4. Your child's ability to remember what he hears is:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

5. Your child's spelling skills are:
   1) Good
   2) Adequate
   3) Below average
   4) Very poor

AD____

COMMUNITY

1. Does your child belong to age appropriate groups such as Scouts, Brownies, 4-H, sports teams, etc.?
   1) Yes, as many as time will allow
   2) Yes, one or two
   3) Yes, but reluctantly
   4) No

2. How well does your child get along with adults in the neighborhood?
   1) Very well
   2) Well
   3) Occasional problems
   4) Frequent problems

3. How well does your child get along with people in the community (store owners, clerks, business people, police, etc.
   1) Very well
   2) Pretty well
   3) Has some problems with them
   4) Often has problems with them

4. How well does your child get around in the neighborhood and/or community?
   1) Better than his friends
   2) As well as most his age
   3) With help and encouragement
   4) Only when forced to

C____

FAMILY

1. How well does your child get along with brothers and sisters?
   N/A Only child
   1) Gets along very well
   2) Gets along as most children do
   3) Does not get along well
   4) Gets along poorly

2. How well does your child get along with parents?
   1) Gets along very well
   2) Gets along as most children do
   3) Does not get along well
   4) Gets along poorly

3. Does your child participate in family activities?
   1) Fully and completely
   2) Willingly
   3) Reluctantly
   4) Refuses participation

4. Does your child do specific assigned chores?
   1) Fully and completely
   2) Willingly
   3) Reluctantly
   4) Refuses responsibilities or none assigned

5. How often does your child demand to have his or her own way?
   1) Very seldom
   2) Once in awhile
   3) Fairly often
   4) Much too often

6. How much self-confidence does your child seem to have?
   1) Very confident
   2) Fairly confident
   3) Low confidence
   4) Lacks confidence

F____

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APPENDIX B

STANINE TABLES

Primary (Grades K-3)

STANINE	COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
9	6	6	8	4	4	5	5	38	9
8	7	6	10	4	4	5	5	45	8
7	7	7	10	6	4	8	5	52	7
6	9	9	12	7	4	9	8	58	6
5	12	10	14	8	5	10	8	68	5
4	13	11	16	9	6	10	10	76	4
3	15	13	18	10	8	12	13	89	3
2	18	16	20	11	10	15	15	99	2
1	19	18	22	12	12	16	16	109	1

Intermediate (Grades 4-6)

STANINE		COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
9	Highly	6	6	8	4	4	5	5	38	9
8	Adaptive	7	7	9	4	4	5	5	43	8
7		7	7	10	6	4	7	5	53	7
6		9	9	13	7	4	9	5	57	6
5	Adaptive	11	10	14	8	5	10	8	67	5
4		13	12	15	8	7	10	10	75	4
3	Less	15	14	18	9	8	11	13	87	3
2	Adaptive	18	16	20	11	9	14	15	99	2
1		20	19	23	13	11	16	17	112	1

Junior High (Grades 7-8)

STANINE	COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
9	6	6	8	4	4	5	5	38	9
8	6	7	9	5	4	5	5	43	8
7	7	7	10	5	4	7	5	49	7
6	9	9	11	7	4	9	5	57	6
5	12	11	13	8	5	10	8	68	5
4	13	12	15	8	7	10	10	76	4
3	16	13	17	10	8	12	13	86	3
2	18	16	19	11	9	15	15	98	2
1	20	19	21	13	11	15	17	114	1

High School (Grades 9-12)

STANINE		COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
9	Highly	6	6	8	4	4	5	5	38	9
8	Adaptive	6	7	9	5	4	5	5	45	8
7		8	8	11	5	4	7	5	51	7
6		9	9	12	7	4	9	6	59	6
5	Adaptive	12	11	14	8	5	10	8	69	5
4		13	12	16	9	7	10	10	77	4
3	Less	15	14	17	10	8	12	13	88	3
2	Adaptive	17	16	19	11	9	14	15	97	2
1		20	18	21	13	12	15	17	110	1

Composite

STANINE		COPING BEHAVIOR	SOCIAL SKILLS	EMOTIONAL DEVELOPMENT	LANGUAGE SKILLS	SELF-CARE	APPLIED COGNITIVE	ACADEMIC DEVELOPMENT	TOTAL	STANINE
Highly	9	6	6	8	4	4	5	5	38	9
Adaptive	8	7	7	9	5	4	5	5	45	8
	7	9	8	10	6	4	7	5	51	7
	6	11	10	12	7	5	9	6	58	6
Adaptive	5	11	11	14	8	6	10	7	68	5
	4	13	12	16	9	7	11	11	76	4
Less	3	15	13	17	10	8	12	13	87	3
Adaptive	2	18	16	20	12	10	15	16	99	2
	1	20	19	22	13	12	16	17	111	1

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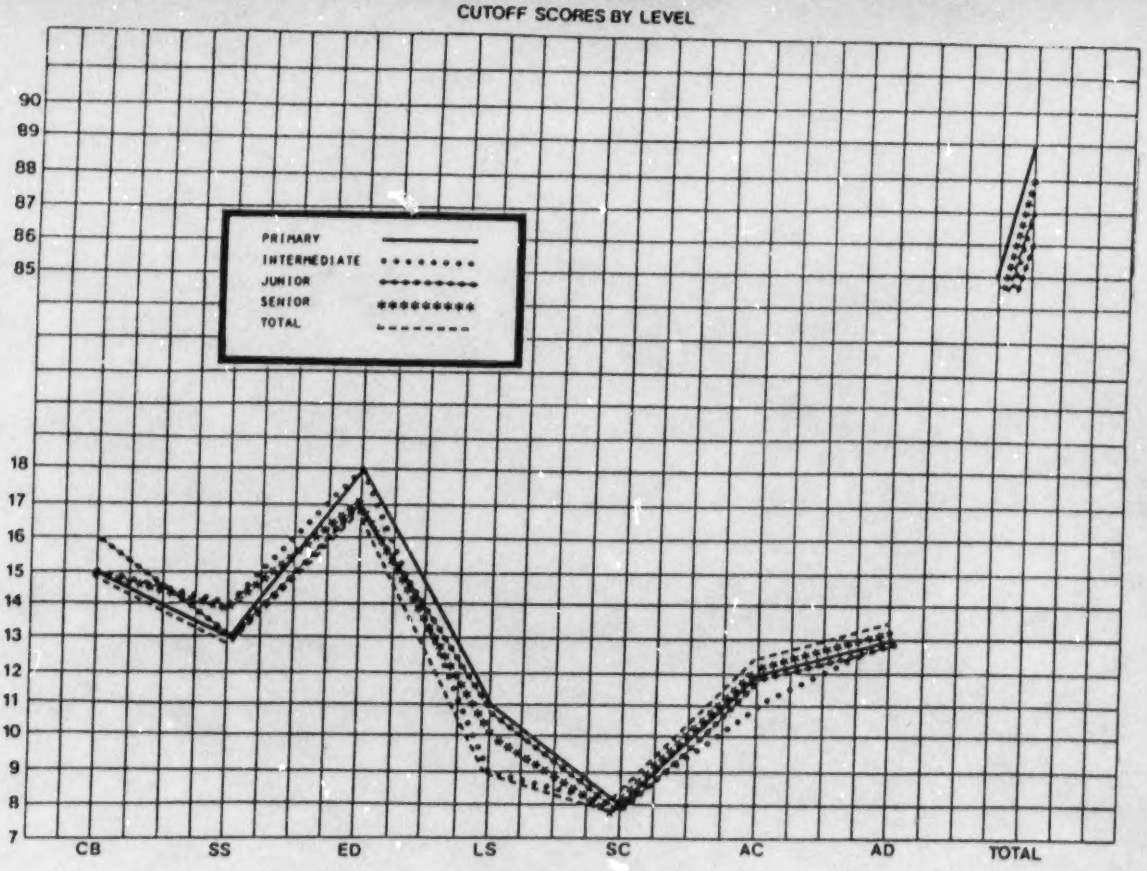
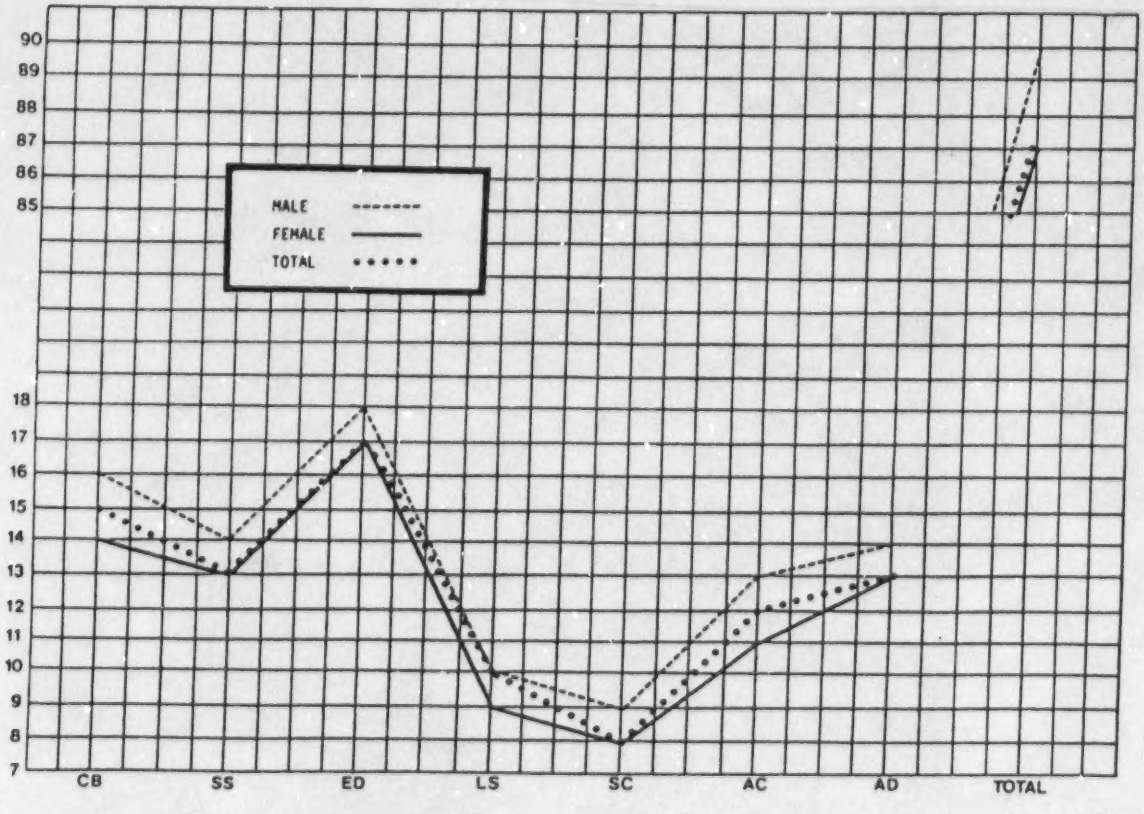
APPENDIX C

GRAPHS OF CUTOFF SCORES BY LEVEL AND BY GENDER

CUTOFF SCORES BY LEVEL



CUTOFF SCORES BY GENDER



APPENDIX D

PERCENTILE RANK TABLES

SCHOOL COPING BEHAVIORS		
X	f	PR
6	38	99
7	66	96
8	70	88
9	58	80
10	54	74
11	85	68
12	140	58
13	78	43
14	56	34
15	59	28
16	46	21
17	42	16
18	33	11
19	26	8
20	15	5
21	15	3
22	3	1
23	5	1
24	3	0

N = 892

SOCIAL SKILLS		
X	f	PR
6	33	99
7	77	96
8	61	88
9	85	81
10	91	71
11	127	61
12	144	47
13	76	31
14	54	22
15	38	16
16	32	12
17	25	8
18	18	5
19	17	3
20	3	2
21	8	1
22	0	0
23	1	0
24	2	0

N = 892

EMOTIONAL DEVELOPMENT		
X	f	PR
8	22	99
9	33	98
10	55	94
11	59	88
12	76	81
13	93	72
14	88	62
15	102	52
16	92	41
17	62	30
18	59	23
19	53	17
21	30	11
21	22	7
22	19	5
23	11	3
24	6	2
25	3	1
26	0	1
27	1	1
28	2	0
29	0	0
30	1	0
31	1	0
32	0	0

N = 890

LANGUAGE SKILLS		
X	f	PR
4	37	99
5	52	96
6	86	90
7	114	80
8	244	67
9	114	39
10	79	26
11	69	17
12	41	9
13	21	5
14	11	2
15	6	1
16	2	0

N = 876

SELF CARE SKILLS		
X	f	PR
4	237	99
5	139	73
6	107	57
7	102	45
8	134	33
9	66	18
10	36	10
11	17	6
12	20	4
13	13	2
14	3	1
15	1	0
16	1	0

N = 876

APPLIED COGNITIVE SKILLS		
X	f	PR
5	53	99
6	23	94
7	42	91
8	40	87
9	95	82
10	340	71
11	73	32
12	37	24
13	41	20
14	40	15
15	58	10
16	15	4
17	6	2
18	6	1
19	1	1
20	5	1

N = 875

ACADEMIC DEVELOPMENT		
X	f	PR
5	217	99
6	77	75
7	43	66
8	49	61
9	55	56
10	110	50
11	51	37
12	38	31
13	48	27
14	51	21
15	61	16
16	36	9
17	17	4
18	18	4
19	4	1
20	8	1

N = 875

TOTAL SCORE

X	f	PR	X	f	PR	X	f	PR
38	3	99	86	9	26	134	0	0
39	7	99	87	8	25	135	0	0
40	3	99	88	19	24	136	0	0
41	3	99	89	15	21	137	0	0
42	10	98	90	18	20	138	0	0
43	7	97	91	6	18	139	1	0
44	3	96	92	6	17	140	0	0
45	10	96	93	8	16	141	0	0
46	3	95	94	10	15	142	0	0
47	9	94	95	7	14	143	0	0
48	12	92	96	7	13	144	0	0
49	12	92	97	6	13	145	0	0
50	14	91	98	9	12	146	0	0
51	19	89	99	7	11	147	0	0
52	10	87	100	5	10	148	1	0
53	12	86	101	7	10	149	0	0
54	14	84	102	6	9	150	0	0
55	19	83	103	4	8	151	0	0
56	16	81	104	4	8	152	0	0
57	13	79	105	5	7			
58	18	77	106	4	7			
59	16	75	107	7	6			
60	17	73	108	2	5			
61	14	71	109	7	5			
62	19	70	110	2	4			
63	9	68	111	2	4			
64	16	67	112	4	4			
65	8	64	113	2	3			
66	20	64	114	3	3			
67	19	62	115	1	3			
68	27	59	116	4	3			
69	14	56	117	5	2			
70	9	55	118	1	2			
71	15	54	119	1	2			
72	25	52	120	1	1			
73	25	49	121	1	1			
74	17	46	122	0	1			
75	23	44	123	2	1			
76	15	42	124	1	1			
77	21	40	125	1	1			
78	21	38	126	2	1			
79	18	35	127	0	1			
80	10	33	128	1	1			
81	13	32	129	0	0			
82	13	31	130	1	0			
83	15	29	131	0	0			
84	8	27	132	0	0			
85	7	26	133	1	0			

APPENDIX E

ITEM ANALYSIS TABLES

Item Discrimination

The general recommendation for an appropriate item discrimination value is that it be between .25 and .80. However, if a specific purpose for the instrument involves selecting a certain group, the appropriate range for item discrimination may be different. One might wish to require higher than .25 at the lower end of the range and might accept through 1.00 as appropriate if the group to be selected is the group at the low end of the scale as is the case with this instrument.

Sub-Test and Item Numbers	Primary	Intermediate	Junior High	High School	Total
Coping Behavior					
1	.75	.67	.69	.63	.68
2	.49	.98	.97	.96	.97
3	.63	.80	.84	.63	.78
4	.77	.81	.84	.74	.79
5	.37	.27	.42	.33	.41
6	.84	.84	.75	.70	.77
Social Skills					
1	.61	.51	.51	.48	.52
2	.56	.53	.60	.54	.55
3	.64	.58	.53	.45	.54
4	.51	.55	.43	.45	.48
5	.49	.54	.53	.44	.49
6	.67	.62	.63	.52	.60
Emotional Development					
1	.14*	.19*	.33	.29	.23*
2	.06*	.19*	.09*	.22*	.14*
3	.78	.78	.70	.66	.74
4	.63	.54	.52	.46	.51
5	.69	.68	.62	.55	.63
6	.49	.48	.52	.45	.48
7	.52	.58	.56	.51	.54
8	.09*	.21*	.18*	.19*	.16*
Language Skills					
1	.73	.77	.76	.61	.71
2	.50	.59	.63	.73	.61
3	.84	.91	.78	.87	.85
4	.80	.68	.71	.75	.73
Self Care					
1	.40	.21*	.20*	.22*	.24*
2	.27	.10*	.14*	.19*	.16*
3	.62	.38	.29	.20*	.34
4	.67	.41	.43	.35	.44
Applied Cognitive					
1	.83	.70	.68	.62	.71
2	.78	.73	.85	.67	.75
3	.77	.80	.72	.72	.75
4	.75	.80	.91	.87	.83
5	.75	.88	.92	.80	.83
Academic Development					
1	.92	.96	.85	.87	.90
2	.75	.89	.82	.90	.84
3	.79	.91	.91	.93	.88
4	.76	.72	.80	.80	.76
5	.90	.86	.86	.88	.87

Number & Per Cent Selecting Each Response for Each Item

Sub-Test and Item #/ Response #	Primary		Intermediate		Junior High		High School		Total	
	#	%	#	%	#	%	#	%	#	%
Coping Behavior										
1 - 1	62	28	61	26	49	23	61	24	233	25
2	115	52	125	53	124	57	148	57	512	55
3	39	18	48	21	42	19	48	19	177	19
4	5	3	2	1	5	3	5	2	17	2
2 - 1	46	21	49	21	46	21	56	22	197	21
2	82	38	87	37	89	41	93	36	351	38
3	67	31	71	30	62	29	89	34	289	31
4	26	12	29	13	23	11	24	10	102	11
3 - 1	26	12	20	9	23	11	24	10	93	10
2	140	64	146	62	37	17	158	61	481	52
3	35	16	39	17	130	59	41	16	245	26
4	20	9	31	14	30	14	39	15	120	13
4 - 1	40	18	37	16	47	22	52	20	176	19
2	130	59	131	56	114	52	147	57	522	56
3	42	19	53	23	50	23	55	21	200	22
4	9	4	15	7	9	4	8	3	41	5
5 - 1	97	44	82	35	85	39	98	38	362	39
2	100	46	133	57	105	48	130	50	468	50
3	20	9	19	8	21	10	30	12	90	10
4	4	2	2	1	9	4	4	2	19	2
6 - 1	66	30	79	34	55	25	70	27	270	29
2	90	41	87	37	106	49	124	48	407	44
3	52	24	47	20	41	19	51	20	191	21
4	13	6	23	10	18	9	17	7	71	8
Social Skills										
1 - 1	97	44	95	41	65	30	87	34	344	37
2	85	39	101	43	119	54	130	50	435	47
3	27	13	27	12	32	15	37	15	123	14
4	12	6	13	6	4	2	7	3	36	4
2 - 1	70	32	63	27	52	24	60	23	245	27
2	113	52	130	55	124	57	147	57	514	55
3	31	14	31	14	37	17	50	20	149	16
4	7	4	12	5	7	4	4	2	30	4
3 - 1	63	29	70	30	55	25	57	22	245	27
2	115	52	118	50	127	58	163	63	523	56
3	37	17	39	17	36	17	40	16	152	17
4	6	3	9	4	2	1	1	1	18	2
4 - 1	52	24	42	18	50	23	62	24	206	22
2	133	61	149	64	140	64	153	59	575	62
3	35	16	40	17	28	13	38	15	141	15
4	1	1	5	5	2	1	8	3	16	2
5 - 1	87	38	98	42	100	46	120	46	405	44
2	102	47	92	39	79	36	98	38	371	40
3	28	13	42	18	38	18	41	16	149	16
4	4	2	4	2	3	2	2	1	13	2
6 - 1	19	9	34	15	20	9	23	9	96	11
2	159	72	151	64	142	65	186	72	638	68
3	42	19	46	20	52	24	48	19	188	20
4	1	1	5	3	6	3	4	2	16	2

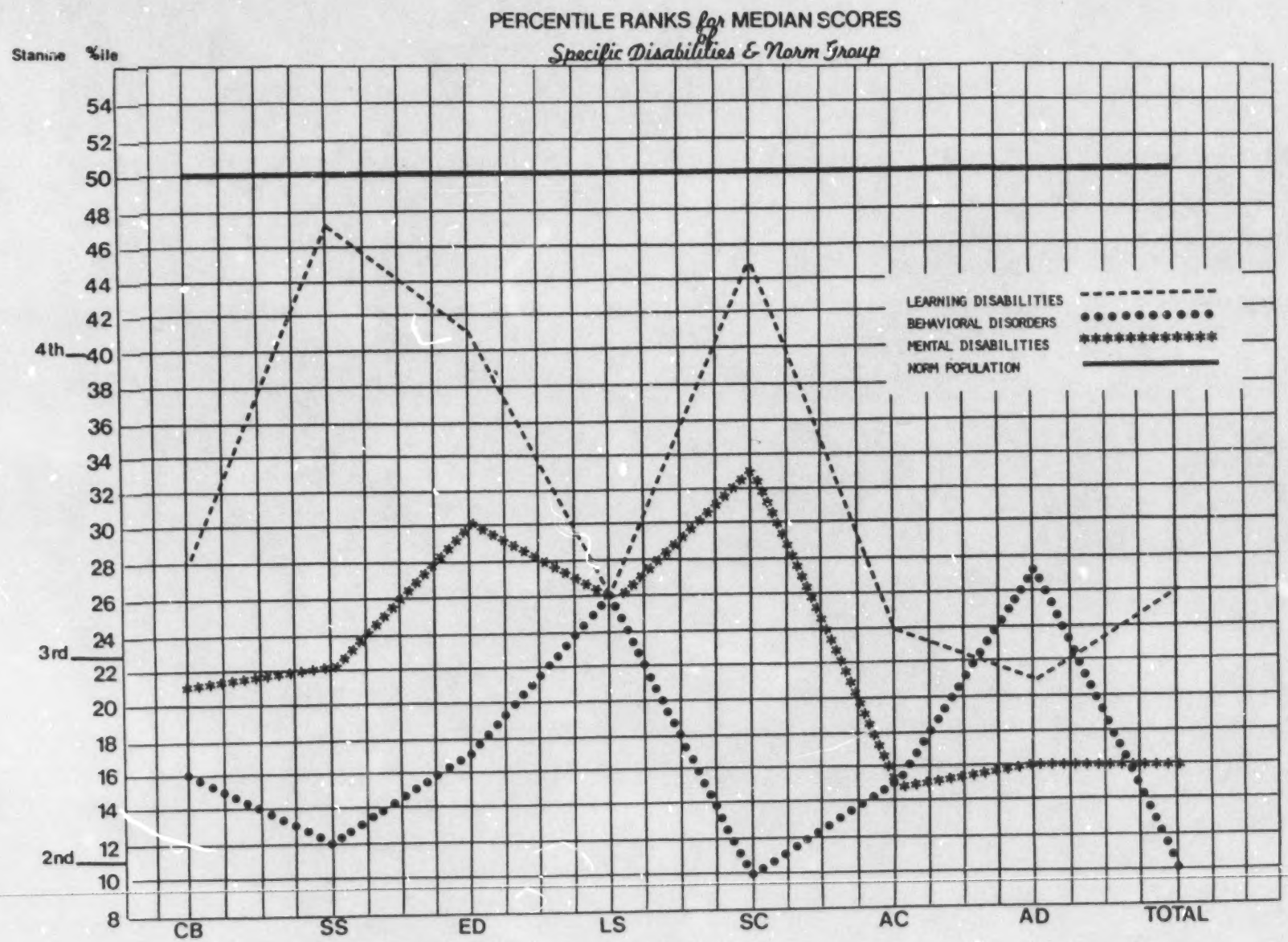
Sub-Test and Item #/ Response #	Primary		Intermediate		Junior High		High School		Total	
	#	%	#	%	#	%	#	%	#	%
Self Care										
1 - 1	143	65	128	55	113	52	135	55	519	57
2	53	24	90	39	90	42	92	37	325	36
3	14	7	13	6	11	5	15	6	53	6
4	11	5	4	2	4	2	6	3	25	3
2 - 1	145	66	135	58	123	57	122	50	525	57
2	60	28	92	40	85	39	108	44	345	38
3	11	5	6	3	9	5	17	7	43	5
4	5	3	2	1	1	1	1	1	9	1
3 - 1	87	40	107	46	86	40	95	39	375	41
2	90	41	95	41	106	49	134	54	425	46
3	37	17	27	12	21	10	18	8	103	12
4	7	4	6	3	3	2	1	1	17	2
4 - 1	96	44	103	44	106	49	105	43	410	45
2	74	34	91	39	77	36	103	42	345	38
3	41	19	29	13	27	13	36	15	133	15
4	10	5	12	6	8	4	4	2	34	4
Applied Cognitive										
1 - 1	43	20	45	20	49	25	54	22	191	21
2	121	55	142	61	126	58	152	62	541	59
3	46	21	33	14	37	17	37	15	153	17
4	11	5	15	7	5	3	4	2	35	4
2 - 1	26	12	35	15	24	11	25	11	110	12
2	144	66	154	66	146	68	179	73	623	68
3	43	20	35	15	40	19	40	17	158	18
4	8	4	11	5	7	4	3	2	29	4
3 - 1	34	16	31	14	31	15	32	13	128	14
2	139	63	155	66	148	69	170	69	612	67
3	41	19	35	15	32	15	40	17	148	16
4	7	4	14	6	6	3	5	2	32	4
4 - 1	28	13	37	16	31	15	28	12	124	14
2	142	65	145	62	131	61	159	65	577	63
3	43	20	41	18	50	23	59	24	193	21
4	8	4	12	6	5	3	1	1	26	3
5 - 1	32	15	35	15	33	16	34	14	134	15
2	143	65	135	58	132	61	158	64	568	62
3	41	19	53	23	47	22	51	21	192	21
4	5	3	12	6	5	3	4	2	26	3
Academic Development										
1 - 1	90	41	98	42	89	41	104	43	381	42
2	62	29	56	24	67	31	87	36	272	30
3	56	26	60	26	46	22	44	18	206	23
4	12	6	21	9	15	7	11	5	59	7
2 - 1	82	38	92	40	73	34	90	37	337	37
2	86	39	63	27	85	40	97	40	331	36
3	40	19	60	26	46	22	54	22	200	22
4	12	6	20	9	13	6	5	2	50	6
3 - 1	86	39	83	36	87	40	94	39	350	39
2	81	37	73	31	65	30	86	35	305	34
3	41	19	60	26	53	25	56	23	210	23
4	12	6	19	8	12	6	10	4	53	6
4 - 1	86	39	88	38	80	37	91	37	345	38
2	80	37	85	37	78	36	98	40	341	38
3	46	21	43	19	53	25	49	20	191	21
4	8	4	19	8	6	3	8	4	41	5
5 - 1	77	35	87	37	79	37	92	38	335	37
2	79	36	72	31	69	32	89	37	309	34
3	46	21	53	23	52	24	48	20	199	22
4	18	9	23	10	17	8	17	7	75	9

Variation in total numbers within levels is due to the omission of subtests by some teachers.

Sub-Test and Item #/ Response #	Primary		Intermediate		Junior High		High School		Total	
	#	%	#	%	#	%	#	%	#	%
Emotional Development										
1 - 1	106	48	93	40	90	41	63	25	352	38
2	102	47	123	53	104	48	167	64	496	53
3	12	6	19	8	25	12	30	12	86	10
4	1	1	1	1	1	1	1	1	4	1
2 - 1	129	59	142	61	152	69	166	64	589	63
2	83	38	78	33	61	28	79	31	301	32
3	7	4	12	5	7	4	15	6	41	5
4	2	1	4	2	0	0	1	1	7	1
3 - 1	42	19	61	26	56	26	87	34	246	27
2	89	41	92	39	102	47	118	46	401	43
3	69	32	58	25	49	23	48	19	224	24
4	21	10	25	11	13	6	8	3	67	8
4 - 1	70	32	77	33	92	42	127	49	366	39
2	83	38	94	40	81	37	84	33	342	37
3	55	25	54	23	39	18	40	16	188	20
4	13	6	11	5	8	4	10	4	42	5
5 - 1	73	33	90	39	107	49	133	51	403	43
2	82	38	75	32	65	30	76	30	298	32
3	47	22	49	21	39	18	44	17	179	19
4	19	9	22	10	9	4	8	3	58	7
6 - 1	70	32	95	41	85	39	67	26	317	34
2	93	42	82	35	71	33	119	46	365	39
3	48	22	45	19	49	23	67	26	209	23
4	10	5	14	6	15	7	8	3	47	5
7 - 1	36	17	39	17	31	14	42	16	148	16
2	131	60	130	55	137	63	158	61	556	60
3	48	22	54	23	47	22	50	20	199	22
4	6	3	13	6	5	3	11	5	35	4
8 - 1	48	22	54	23	41	19	49	19	192	21
2	166	76	165	70	164	75	197	76	692	74
3	7	4	16	7	15	7	13	5	51	6
4	0	0	1	1	0	0	2	1	3	3
Language Skills										
1 - 1	23	11	23	10	35	16	43	18	124	14
2	154	70	155	66	132	61	161	65	602	66
3	41	19	56	24	49	23	42	17	188	21
4	3	2	2	1	2	1	2	1	9	1
2 - 1	64	29	49	21	45	21	57	23	215	24
2	127	56	138	59	121	56	124	50	505	55
3	31	14	38	17	40	19	58	24	167	18
4	4	2	11	5	12	6	9	4	36	4
3 - 1	39	18	33	14	31	15	30	12	133	15
2	119	54	136	58	133	61	152	62	540	59
3	52	24	44	19	42	42	50	21	188	21
4	11	5	23	10	12	6	16	7	62	7
4 - 1	34	16	44	19	45	21	56	23	179	20
2	126	57	136	58	125	58	125	51	512	56
3	57	26	43	19	44	21	65	27	209	23
4	4	2	13	6	4	2	2	1	23	3

APPENDIX F

PERCENTILE RANKS FOR MEDIAN SCORES


PERCENTILE RANKS for MEDIAN SCORES
Specific Disabilities & Norm Group
Stanine
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4th
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52
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18
16
14
12
10
8
CB
SS
ED
LS
SC
AC
AD
TOTAL
LEARNING DISABILITIES
BEHAVIORAL DISORDERS
MENTAL DISABILITIES
NORM POPULATION